

Customer Number: 000959

Attorney's  
Docket  
Number GNN-010CP

Declaration, Petition and Power of Attorney for Patent Application

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

Methods of Preventing Immune-Mediated Abortion By Inhibiting Costimulatory Signals

the specification of which

(check one)

     is attached hereto.

X was filed on July 28, 2000 as

Application Serial No. 09/628,129

and was amended on                       
(if applicable)

I do not know and do not believe that the subject matter of this application was known or used by others in the United States or patented or described in a printed publication in any country before my invention thereof, or patented or described in a printed publication in any country or in public use or on sale in the United States more than one year prior to the date of this application, or first patented or caused to be patented or made the subject of an inventor's certificate by me or my legal representatives or assigns in a country foreign to the United States prior to the date of this application on an application filed more than twelve months (six months if this application is for a design) before the filing of this application; and I acknowledge my duty to disclose information of which I am aware which is material to the examination of this application, that no application for patent or inventor's certificate on the subject matter of this application has been filed by me or my representatives or assigns in any country foreign to the United States, except those identified below, and that I have reviewed and understand the contents of the specification, including the claims as amended by any amendment referred to herein.

I acknowledge the duty to disclose to the Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

## CLAIM OF BENEFIT OF EARLIER FOREIGN APPLICATION(S)

I hereby claim priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below, and have also identified below any foreign application(s) for patent or inventor's certificate filed by me on the same subject matter having a filing date before that of the application(s) from which priority is claimed.

Check one:

☒ no such applications have been filed.

☐ such applications have been filed as follows

EARLIEST FOREIGN APPLICATION(S), IF ANY, FILED WITHIN 12 MONTHS  
(6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION

Country	Application Number	Date of Filing (month,day,year)	Priority Claimed Under 35 USC 119
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No

ALL FOREIGN APPLICATION(S), IF ANY FILED MORE THAN 12 MONTHS  
(6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION


CLAIM FOR BENEFIT OF U.S. PROVISIONAL APPLICATION(S)

I hereby claim the benefit under 35 U.S.C. §119(e) of any United States provisional application(s) listed below.

\_\_\_\_\_  
(Application Serial No.)

\_\_\_\_\_  
(Filing Date)

\_\_\_\_\_  
(Application Serial No.)

\_\_\_\_\_  
(Filing Date)

CLAIM FOR BENEFIT OF EARLIER U.S./PCT APPLICATION(S)

I hereby claim the benefit under Title 35, United States Code, §120 of any earlier United States application(s) or PCT international application(s) designating the United States listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the earlier application(s) in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose to the Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date(s) of the earlier application(s) and the national or PCT international filing date of this application. As to subject matter of this application which is common to my earlier application(s), if any, described below, I do not know and do not believe that the same was known or used by others in the United States or patented or described in a printed publication in any country before my invention thereof, or patented or described in a printed publication in any country or in public use or on sale in the United States more than one year prior to the date(s) of said earlier application(s), or first patented or caused to be patented or made the subject of an inventor's certificate by me or my legal representatives or assigns in a country foreign to the United States prior to the date(s) of said earlier application(s) on an application filed more than twelve months (six months if this application is for a design) before the filing of said earlier application(s); and I acknowledge that no application for patent or inventor's certificate on said subject matter has been filed by me or my representatives or assigns in any country foreign to the United States except those identified herein.

09/362,812  
(Application Serial No.)

July 28, 1999  
(Filing Date)

Pending  
(Status)  
(patented,pending,aband.)

(Application Serial No.)

(Filing Date)

(Status)  
(patented, pending, aband.)

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

James E. Cockfield	Reg. No. 19,162	Nicholas P. Triano III	Reg. No. 36,397
Thomas V. Smurzynski	Reg. No. 24,798	Peter C. Lauro	Reg. No. 32,360
Ralph A. Loren	Reg. No. 29,325	DeAnn F. Smith	Reg. No. 36,683
Giulio A. DeConti, Jr.	Reg. No. 31,503	William D. DeVaul	Reg. No. 42,483
Ann Lamport Hammitte	Reg. No. 34,858	David J. Ridders	Reg. No. 43,882
Elizabeth A. Hanley	Reg. No. 33,505	Chi Suk Kim	Reg. No. 42,728
Amy E. Mandragouras	Reg. No. 36,207	Maria Laccotripe Zacharakis	Limited Recognition
Anthony A. Laurentano	Reg. No. 38,220		Under 37 C.F.R. § 10.9(b)
Jane E. Remillard	Reg. No. 38,872	Debra J. Milasincic	Reg. No. 46,931
Jeremiah Lynch	Reg. No. 17,425	David R. Burns	Reg. No. 46,590
Kevin J. Canning	Reg. No. 35,470	Sean D. Detweiler	Reg. No. 42,482
Jeanne M. DiGiorgio	Reg. No. 41,710	Peter S. Stecher	Reg. No. P47,259
Megan E. Williams	Reg. No. 43,270	Adam M. Goodmann	Reg. No. 43,640

of LAHIVE & COCKFIELD, LLP, 28 State Street, Boston, Massachusetts 02109, United States of America, and

Ellen J. Kapinos	Reg. No. 32,245	Barbara A. Gyure	Reg. No. 34,614
M. Andrea Ryan	Reg. No. 28,469	Elizabeth A. Hurley	Reg. No. 41,859
M. Kymne Hehman	Reg. No. 39,206		

of 87 CambridgePark Drive, Cambridge, Massachusetts 02140, United States of America,

Egon E. Berg	Reg. No. 21,117	Elizabeth M. Barnhard	Reg. No. 31,088
Gale F. Matthews	Reg. No. 32,269	Alan M. Gordon	Reg. No. 30,637
Darryl L. Webster	Reg. No. 34,276		

of One Campus Drive, Parsippany, New Jersey 07054, United States of America, and

Rebecca R. Barrett	Reg. No. 35,152	Steven R. Eck	Reg. No. 36,126
Arnold S. Milowsky	Reg. No. 35,288	Michael R. Nagy	Reg. No. 33,432
George Tarnowski	Reg. No. 27,472		

of P.O. Box 8299, Philadelphia, Pennsylvania 19101, United States of America.

Send Correspondence to: **Amy E. Mandragouras, Esq., Lahive & Cockfield, LLP, 28 State Street, Boston, Massachusetts 02109, United States of America**

Direct Telephone Calls to: **Amy E. Mandragouras, Esq. (617) 227-7400**

Wherefore I petition that letters patent be granted to me for the invention or discovery described and claimed in the attached specification and claims, and hereby subscribe my name to said specification and claims and to the foregoing declaration, power of attorney, and this petition.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor Vincent Ling	
Inventor's signature <i>Vincent Ling</i>	Date 11/17/00
Residence 19 Forsythia Drive, Walpole, MA 02081 USA	
Citizenship United States	
Post Office Address (if different)	

Full name of second inventor, if any Gary S. Gray	
Inventor's signature <i>Gary S. Gray</i>	Date NOV. 17, 2000
Residence 32 Milton Road, Brookline, Massachusetts 02146	
Citizenship United States	
Post Office Address (if different)	

Full name of third inventor James C. Keith, Jr.	
Inventor's signature <i>James C. Keith, Jr.</i>	Date November 13, 2000
Residence 28 Vine Street, Andover, Massachusetts 01810	
Citizenship United States	
Post Office Address (if different)	

Full name of fourth inventor Srinivas Maganti	
Inventor's signature <i>Srinivas Maganti</i>	Date November 13, 2000
Residence P.O. Box 662, Portsmouth NH 03802-0662	
Citizenship United States	
Post Office Address (if different)	



**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APRIL 02, 2001

PTAS

LAHIVE & COCKFIELD, LLP  
AMY E. MANDRAGOURAS  
28 STATE STREET  
BOSTON, MA 02109



\*101593405A\*

**UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT**

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 01/16/2001

REEL/FRAME: 011444/0267  
NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

LING, VINCENT

DOC DATE: 11/09/2000

ASSIGNOR:

GRAY, GARY S.

DOC DATE: 11/09/2000

ASSIGNOR:

KEITH, JAMES C., JR.

DOC DATE: 11/13/2000

ASSIGNOR:

MAGANTI, SRINIVAS

DOC DATE: 11/13/2000

ASSIGNEE:

GENETICS INSTITUTE, INC.  
87 CAMBRIDGE PARK DRIVE  
CAMBRIDGE, MASSACHUSETTS 02140

SERIAL NUMBER: 09628129

FILING DATE: 07/28/2000

PATENT NUMBER:

ISSUE DATE:

011444/0267 PAGE 2

PAULA MCCRAY, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS



FORM PTO-1595

RE

01-25-2001

EET

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office(Rev. 6-93)  
OMB No. 0651-0011 (exp. 4/94)

Tab settings ⇄⇄⇄▽

101593405

To the Honorable Commissioner of Patents and Trademarks, I agree to record the attached original documents or copy thereof.

## 1. Name of conveying party(ies):

- 1) Vincent Ling  
2) Gary S. Gray  
3) James C. Keith, Jr.  
4) Srinivas Maganti

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

## 3. Nature of conveyance

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other

Execution Date: 1 & 2) November 9, 2000  
3 & 4) November 13, 2000

## 2. Name and address of receiving party(ies)

Name: Genetics Institute, Inc.

Internal Address:

Street Address: 87 CambridgePark Drive

City: Cambridge State: MA ZIP: 02140

Additional name(s) & address(es) attached? ☐ Yes ☒ No

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

## A. Patent Application No.(s)

09/628,129

## B. Patent No.(s)

Additional numbers attached? ☐ Yes ☐ No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Amy E. Mandragouras

Internal Address: Lahive &amp; Cockfield, LLP

Street Address: 28 State Street

City: Boston State: MA ZIP: 02109

## 6. Total number of applications and patents involved:

1

7. Total fee (37 CFR 3.41).....\$ 40.00

- ☒ Enclosed  
☐ Authorized to be charged to deposit account

## 8. Deposit account number:

12-0080

DO NOT USE THIS SPACE

## 9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Megan E. Williams

Name of Person Signing

Signature

Date

Total number of pages including cover sheet, attachments, and document:

5

Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents and Trademarks, Box Assignments  
Washington, D.C. 20231

1/2001 6TON11 00000210 09628129

1:581

40.00 CP

ASSIGNMENT

We, Vincent Ling of Walpole, MA, Gary S. Gray of Brookline, MA, James C. Keith of Andover, MA, and Srinivas Maganti of Portsmouth, NH, in consideration of One Dollar and other valuable consideration paid to us by

Genetics Institute, Inc.

a corporation of Delaware, having its principal place of business at 87 CambridgePark Drive, Cambridge, MA 02140, the receipt of which is hereby acknowledged, do hereby sell, assign and transfer unto said

Genetics Institute, Inc.

its successors and assigns, the entire interest for the United States of America and all foreign countries including all rights of priority under the International Convention for the Protection of Industrial Property in a certain invention or improvement in

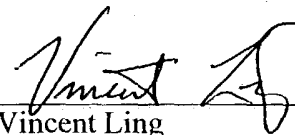
Methods of Preventing Immune-Mediated Abortion by Inhibiting Costimulatory Signals  
described in an application

- ☐ executed by us of even date herewith and about to be filed  
☒ Serial No. 09/628,129, filed on July 28, 2000

in the United States Patent and Trademark Office, and in all Letters Patent of the United States and all foreign countries which may or shall be granted on said invention, or any parts thereof, or on said application, or any divisional, continuing, reissue or other applications based in whole or in part thereon. And we agree, for ourselves and our executors and administrators, with said corporation and its successors and assigns but at its or their expense and charges, hereafter to execute all applications, amended specifications, deed or other instrument, and to do all acts necessary or proper to secure the grant of Letters Patent in the United States and in all other countries to said corporation, with specifications and claims in such form as shall be approved by the counsel of said corporation and to vest and confirm in said corporation, its successors and assigns, the legal title to all such patents.

And we do hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said corporation, its successors and assigns.

WITNESS my hand and seal this 9 day of Nov, 2000.

By:   
Vincent Ling

State of Massachusetts )  
  ) ss  
County of Middlesex )

MARY C. FRATTO  
Notary Public  
My Comm. Expires Oct. 9, 2003

It appeared the above named Vincent Ling and acknowledged the foregoing  
free act and deed, before me, this 9 day of November, 2000.



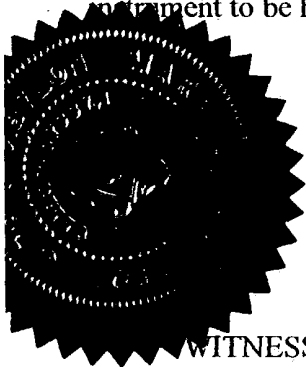
  
Notary Public

WITNESS my hand and seal this 9 day of November, 2000.

By: Gary S. Gray  
Gary S. Gray

State of Massachusetts )  
County of Middlesex ) ss

Then personally appeared the above named Gary S. Gray and acknowledged the foregoing instrument to be his/her free act and deed, before me, this 9 day of November, 2000.



MARY C. FRATTO  
Notary Public  
My Comm. Expires Oct. 9, 2003

Mary C. Fratto  
Notary Public

My commission expires: Oct. 9, 2003

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2000.

By: James C. Keith, Jr.  
James C. Keith, Jr.

State of Massachusetts )  
County of Middlesex ) ss

Then personally appeared the above named James C. Keith and acknowledged the foregoing instrument to be his/her free act and deed, before me, this 13 day of November, 2000.

Anne L. Collins  
Notary Public

My commission expires: \_\_\_\_\_

Anne L. Collins  
Notary Public  
Commission Expire :  
April 15, 2005

WITNESS my hand and seal this 13 day of November, 2000.

By: Srinivas Maganti  
Srinivas Maganti

State of Massachusetts )  
County of Middlesex ) ss

Then personally appeared the above named Srinivas Maganti and acknowledged the foregoing instrument to be his/her free act and deed, before me, this 13 day of November, 2000.

Anne L. Collins  
Notary Public

My commission expires: \_\_\_\_\_

Anne L. Collins  
Notary Public  
Commission Expires:  
April 15, 2005